

REMARKS

This is in response to the non-final Office Action mailed on June 5, 2006, in which claims 1-20 are pending. Claims 1-12 and 15-20 stand rejected and claims 13 and 14 are objected to in the Action. By this Response, claims 1, 8, 10, 12, 13, and 15 are amended. All other pending claims remain unchanged in the application. Applicants respectfully request favorable action on this matter.

Claims 1-3, 6-8 and 10-12 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over the Applicants' admitted prior art, U.S. Pat. Pub. 2003/0172222 of Paskonis, U.S. Pat. Pub. No. 2002/0112688 of Fariz et al. (hereinafter "Fariz"), and U.S. Pat. No. 5,602,526 of Read.

Independent claim 1 is directed toward an interlock arrangement for controlling selected functions of a body having power components and a hinged and closeable door. The interlock arrangement includes a sensor and a sensor actuator. Claim 1, as now amended, recites that the sensor is attached to one of the latch and the latch striker and the sensor actuator is attached to the other of the latch and the latch striker. The sensor provides a signal indicating that the door is closed when the latch is adjacent to the latch striker. The selected functions of the body having power components are thereby enabled when the door is closed.

The Office Action admits that the alleged prior art admission fails to teach a sensor and an interlock arrangement implemented into the vehicle. The Applicants respectfully submit that the combination of Paskonis, Fariz and Read fail to correct these deficiencies. The Office Action asserts that

Paskonis teaches a door with a sensor mounted on the door adjacent to a latch and a striker on the vehicle body. Paskonis teaches a sensor mounted adjacent to the latch. However, Paskonis fails to teach a sensor actuator being mounted adjacent to either of the latch or the striker, or for that matter, any sensor component mounted to the striker. The Fariz and Read references fail to correct this deficiency. Neither Fariz nor Read teach or suggest a sensor assembly having a sensor and a sensor actuator attached to one of a striker and a latch. The Fariz reference makes no specific teaching or suggestion of a particular type of a sensor for a door other than to state that "a conventional electrical switch" can be mounted on the door of the vehicle.

The Read reference similarly provides no teaching or suggestion that a switch having both a sensor and a sensor actuator, where one or the other is attached to a latch and a striker. Read teaches a switch actuator mounted on the top of a door and a switch mounted to a wall of a trailer. When the door is in a closed position, the switch actuator in combination with a sensor mounted on a wall of a trailer portion of a truck monitors the position of the door. While Read teaches applying its sensor configuration to a rolling door, it suggests that such a configuration could be applied to a hinged door, which is similar to the door suggested in Paskonis. However, Read fails to teach a sensor located in an area of a latch/latch striker mechanism. In fact, Read specifically teaches only the arrangement of a switch actuator on a door and a switch on the trailer.

Read further teaches that the door need not be latched in order for its sensor to recognize the presence of the door.

Specifically, in column 3, lines 34-38, Read teaches that there is an "offset" between a sensor and a sensor actuator to allow the door to "bounce without causing the switch to close." Thus, the Read reference fails to make any teaching or suggestion that its sensor can be applied to a latch/striker mechanism. Rather, it specifically teaches away from that.

Thus, there is no teaching in Read that suggests such a switch could be used in a latch or latch striker location. In fact, none of the cited references teach or suggest attaching a sensor or sensor actuator to a striker mechanism. By contrast, the interlock mechanism of claim 1 specifically recites that one or the other of the sensor and sensor actuator is attached to the latch striker. With a hinged door of the type recited in claim 1, attaching a sensor or sensor actuator on each of the latch and latch striker provides an improved structure for sensing that the door is in fact latched into a closed position. With the sensor or sensor actuator on the striker mechanism, the invention recited in claim 1 provides for a structure that specifically senses that the striker is engaged with the latch.

Therefore, the combination of the cited references fails to teach or suggest all of the recited elements of claim 1. For this reason, Applicants submit that claim 1, and claims 2-3 and 6-7, all of which depend from claim 1, are allowable over the references cited. Withdrawal of the rejection is respectfully requested.

Independent claim 8 is directed toward a loader having a door for permitting entrance to an egress from a cab. The door is hingedly mounted to the cab and there is a latch and a

latch striker for the latch so that when the latch engages the latch striker, the door is held closed. Independent claim 8 recites the feature of a two component sensor arrangement positioned between the door and a portion of the cab adjacent the door opening. The sensor arrangement senses whether the latch is in engagement with the latch striker to hold the door closed. The sensor arrangement is connected to a lockout to disable operating functions when the door is not held closed.

Applicants submit that, as discussed above with respect to independent claim 1, the combination of Applicants' alleged prior art admission, Paskonis, Fariz, and Read fail to teach or suggest all the recited features of independent claim 8. Specifically, none of the references, alone or in combination, teach a two-component sensor arrangement between the door and a portion of the cab that is positioned to sense whether the latch is in engagement with the latch striker. Paskonis teaches a single-component sensor. Fariz provides no particular teaching of a sensor. Read teaches a two-component sensor, but, as described above, Read teaches away from positioning a two-sensor component in a latch/striker mechanism. As discussed above with respect to claim 1, there is no teaching or suggestion that a two-component sensor that senses whether a latch is in engagement with a latch striker to hold a door closed. For at least these reasons, Applicants submit that claim 8 and its dependent claims 10-12 are allowable over the references cited. Withdrawal of the rejection is respectfully requested.

Claims 4 and 5 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over prior art admission of the Applicants, Paskonis, Fariz, and Read, as applied to claims 1-

3 above and further in view of U.S. Pat. Pub. 2004/0203381 of Cahn et al. As discussed above, Applicants submit that claim 1 is allowable over the cited references. For at least that reason, Applicants further submit that claims 4 and 5, which depend from claim 1 are also allowable over the references cited. Withdrawal of the rejection is respectfully requested.

Claims 9 and 15-20 stand rejected under 35 U.S.C. § 103(a) as allegedly being unpatentable over Applicants' admitted prior art, Paskonis, Fariz, Read, and further in view of U.S. Pat. Pub. 2004/0000799 of Wherley.

Claim 9 depends from independent claim 8, which, as described above, is submitted to be allowable over the cited references. For at least this reason, claim 9 is likewise submitted to be allowable over the references cited. Withdrawal of the rejection is requested.

Independent claim 15 has been amended to more particularly point out and distinctly claim the invention. As amended, claim 15 is directed toward an interlock arrangement for controlling operation of power components on a powered vehicle. The vehicle includes an operator access opening and a removable door for closing the access opening. The door has a closed position where the door is positioned out of a zone of movement of power components. The vehicle further includes a latch with first and second latch components. The first latch component is mounted on the door and the second latch component is mounted on the vehicle. The first and second latch components mate to hold the door in its closed and latched position. A sensor is included to sense the position of the door.

The interlock arrangement further includes an interlock controller with a sensor input configured to receive a signal from the sensor indicative of the position of the door. The interlock controller is configured to provide an output to enable operation of at least one power component when the door is in the closed position. In addition, the interlock controller is configured to permit operation of the at least one power component when the door and the first component of the sensor are removed from the vehicle. This provides a system that prevents a power component from being operated to damage a partially open door, but permits operation if the door and the first component of the sensor are completely removed.

The Office Action asserts that the combinations of the Applicants' prior art admission, Paskonis, Fariz, and Read teach an interlock arrangement of the type recited in independent claim 15. However, independent claim 15 specifically recites a sensor for enabling operation having a first sensor element and a second sensor element. Further, the first sensor element is mounted adjacent the first latch component and the second sensor element is mounted adjacent the second latch component. None of the references, alone or in combination, teach or suggest a sensor having first and second sensor elements each of which is positioned adjacent to one of the first and second latch components. The Paskonis reference teaches a latch striker with a sensor mounted on the back plate of the striker assembly. Paskonis fails to teach that a sensor assembly would have a first and second sensor component, much less that a second sensor element would be positioned on a latch assembly.

Just as Paskonis fails to teach a two-component sensor assembly adjacent to a latch and latch/striker mechanism, none of the Fariz, Read, and Wherley references teach or suggest such a sensor assembly located in a latch/striker assembly. Read teaches a sensor assembly located away from any latch mechanism that might be on a door. Fariz provides no teaching of the location of a switch. Wherley teaches a sensor that is not positioned in a latch/striker assembly. Therefore, Applicants submit that the combination of the references provided do not teach a latch/striker assembly having a sensor component positioned adjacent to each of the latch and the latch striker.

In addition, there is no teaching or suggestion in any of the references of an interlock controller with a sensor input configured to receive a signal from the sensor indicative of the position of the door. Nor do any references teach or suggest an interlock controller that is configured to enable the at least one power component when the door is either closed or when the door is removed from the vehicle so that it is out of harm's way. For at least these reasons, Applicants submit that independent claim 15, and its dependent claims 16-20, are allowable over the references cited.

Applicants acknowledge and thank the Examiner for recognizing that claims 13 and 14 contain allowable subject matter. Applicants have amended claim 13 to correct a minor grammatical error. However, in light of the remarks above, Applicants submit that claims 13 and 14, both of which are dependent from independent claim 8, are allowable as written. Withdrawal of the rejection is respectfully requested.

In summary, by this Action, claims 1, 8, 10, 12, 13, and 15 are amended. Applicants submit that all pending claims 1-20 in light of the amendments and remarks provided above are allowable. Favorable action is respectfully requested.

Respectfully submitted,

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